

STRESS, LIFE SATISFACTION, SATISFACTION WITH PARENTAL AND PEERS RELATIONSHIP AND SUICIDAL IDEATION AMONG MALAYSIAN ADOLESCENTS

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ABSTRACT

Suicide has been increasing at an alarming rate throughout the world including our nation. Adolescents have become one of the high risk groups for suicidality. Thus, it is important to explore suicidal ideation especially among adolescents in order to curb this issue. This study aimed to investigate stress, life satisfaction, satisfaction with parental and peers relationship and suicidal ideation among Malaysian adolescents. This study employed a cross-sectional research design where the respondents were recruited using multistage cluster sampling. Result highlighted that 60.1 percent of the respondents had suicidal thoughts. Independent Samples t-test analysis revealed that adolescents with suicidal ideation had more stress and were less satisfied with life, maternal relationship, paternal relationship and peers relationship compared to adolescents without suicidal ideation. Binomial Logistic Regression indicated that stress increased the likelihood of suicidal ideation while life satisfaction reduced the likelihood of having suicidal thoughts. Thus, practitioners should emphasize on providing suitable intervention especially on stress management programs and being satisfied with life workshops in order to curb suicidal ideation among adolescents.

Keywords: Life satisfaction, Parental and peers relationship, Stress, Suicidal ideation

INTRODUCTION

Suicide is a serious public health issue worldwide. The World Health Organization (WHO) reported approximately 800,000 people die from suicide every year (WHO, 2015). More seriously, suicide has become the third leading cause of death for adolescents aged 10 to 19 years old (WHO, 2014). This is due to adolescence is a period of “storm and stress” where they experience various emotional and behavioral disruptions (Arnett, 2006). Thus, adolescents have a higher risk of committing in suicide behaviors.

In Malaysia, suicidal cases are on the rise. The National Suicide Registry Malaysia (NSRM) reported that a total of 290 registered suicide cases were found in 2008. In 2009, the total number of registered suicide cases increased to 328 cases (NSRM Ministry of Health Malaysia, 2011). In 2010, it was found that an average of 60 suicide cases happened every month in Malaysia which is equivalent to two cases each day in 2010 (Ng, 2012). These figures were reported by the National Suicide Registry Malaysia (NSRM) where they analyzed data of completed suicide from all the forensic departments in Malaysia with the supervision of the Ministry of Health Malaysia (Nor Hayati et al., 2014). The increased number of suicide cases highlighted the seriousness of this issue in our nation. Thus, it is important to curb this issue by identifying the factors that cause people to involve in suicidal behaviors.

Suicidal ideation is a precursor of suicidal attempts and suicidal behaviors. People with suicidal ideation have thoughts about ending their life (O’Carroll et al., 1996). The World Health Organization found that the figures of people with suicidal thoughts are much more beyond those committed suicide (WHO, 2015). Suicidal ideation was caused by various factors including self, parents and peers. Henceforth, by focusing on the factors that cause adolescents to think of suicide strongly help in intervening suicidality issues.

LITERATURE REVIEW

There are various factors that are associated with suicidal ideation such as feeling stressful (Park & Chung, 2014), not satisfied with one's life (Kim & Kim, 2008) and not satisfied with their relationship with other people (Yao et al., 2014). The level of stress is one of the main factors suicidal ideation occurred among adolescents. In this modern era, rapid social and economic changes cause adolescents to be under heavy pressure (Zhang, Wang, Xia, Liu & Jung, 2012). When adolescents are unable to cope with the heavy pressure from daily hassles, stress eventually occurred. Consequently, stresses become unbearable which lead adolescents to have negative thinking including the thoughts of committing suicide (Chang, Yang, Lin, Ku & Lee, 2008; Park & Chung, 2014). Zhang and colleagues (2012) found that life stress was associated with suicidal ideation and was also a strong predictor of suicidal ideation. Students with stress were two times riskier in having suicidal thoughts. Thus, adolescents who are under stress are at-risk of experiencing suicidal thoughts.

Stress was also caused by academic issues among adolescents. Nowadays, parents and teachers exert high expectations on adolescents where they expect them to excel academically. The high expectations caused adolescents to feel stress which consequently increased the risk of suicidal thoughts, plan and attempt among students (Ang & Huan, 2006; Park & Chung, 2014). In sum, adolescents nowadays are facing more stress which causes more of them to have suicidal ideation whenever they are unable to cope with it.

Beside stress, life satisfaction is another important factor of suicidality. Life satisfaction is a subjective assessment of individual made on the quality of their life based on self-defined standard (Gilman, Huebner & Laughlin, 2000). Past study found that adolescents who were dissatisfied with their life involved in serious suicide consideration, suicidal plan, and also suicidal attempt (Valois, Zullig, Huebner & Drane, 2004). Moreover, Kim and Kim (2008) revealed that adolescents who had attempted suicide were less satisfied with their life and experienced more frustration. Another recent study by Yao et al. (2014) also reported that life satisfaction was

negatively associated with suicidal ideation among adolescents. These past studies supported that satisfaction with life is an important factor in preventing adolescents to be involved in suicidality.

Other than that, social figure such as parents play an important role in adolescents' development. They not only served as a role model for adolescents, but also as a supporting and caring figure that help them whenever they needed help (Santrock, 2008). Thus, having a good and satisfied relationship with parents is crucial for a healthy outcome. Previous study by Xing et al. (2010) reported that improper parental rearing, separation from parents and social problems in family increased the risk of suicide attempts among adolescents. Evidence has also highlighted that adolescents who were satisfied with their family relationship were found to be less likely to have depressive feelings and suicidal thoughts (Samm et al., 2010). Henceforth, it is important for adolescents to maintain a satisfactory relationship with their parents.

Other than parents, peers are important social figure that impact adolescents' well-being including risky behaviors (Livaudais, Napoles-Springer, Stewart & Kaplan, 2007). Adolescents believed in their friends and were able to discuss with them anything even about death (Kok, Gan & Goh, 2011). However, evidence highlighted that adolescents who experienced low connectedness in school and felt poor in peer group were associated with suicidal attempt (Tang et al., 2009). Moreover, adolescents who experienced problems in peer relationship such as lack of associations with friends and being victimized were associated with suicidal ideation and suicidal attempts (Cui, Cheng, Xu, Chen & Wang, 2011). Therefore, dissatisfaction with peer relationship exerts more risk on adolescents in having suicidal thoughts.

As mentioned above, there are various factors that cause adolescents to have suicidal ideation. Suicide is indeed a very serious mental health issue in Malaysia; however research on this issue is still scarce in our nation (NoorAni, Cheong, Nurashikin & Azriman, 2014). Therefore, it is important to emphasize on this issue and investigate the factors that are associated with suicidal ideation among adolescents. The current

study investigates this issue with two main objectives. The first objective is to examine the differences between adolescents with and without suicidal ideation in terms of stress, life satisfaction, satisfaction with parental and peers relationship. The second objective is to explore the likelihood of stress, life satisfaction, satisfaction with parental and peers relationship in influencing suicidal ideation among Malaysian adolescents. The findings of this study will provide a more in-depth understanding on suicidal ideation which in turns may able to help to curb this problem in Malaysia.

METHODOLOGY

Sampling

A total of 684 school-going adolescents were involved in the current study. They were recruited from twelve different national high schools in the Selangor area using multistage cluster sampling. Prior in conducting this research, ethical clearance was gained through the Ethics Committee for Research involving Human Subjects Universiti Putra Malaysia (JKEUPM). Moreover, both the Ministry of Education Malaysia and Education Department of Selangor had given approval to conduct this study in local school setting. Lastly, approval from school principals was obtained from each participating schools.

The respondents involved in the current study were initially briefed regarding the purposes and confidentiality of the study. Consent from each respondent was acquired. Self-administered questionnaires were distributed and collected upon completion on the same day. From the data obtained, the respondents were aged between 14 to 17 years old. There were a total of 379 female (55.4 percent) and 305 male (44.6 percent) adolescents. Analysis revealed that 60.1 percent of the adolescents reported having suicidal thoughts.

INSTRUMENTATION

Suicidal ideation was measured using the Positive and Negative Suicide Ideation Inventory (PANSI; Osman, Gutierrez, Kopper, Barrios & Chiro, 1998). This instrument consists of positive ideation and negative ideation. The negative ideation was used in the current study to measure the thoughts of one to commit suicide. It consists of eight items scored on a 5-point scale. Each item is rated from 0 = none of the time to 5 = most of the time. However, only six items were used in the current study due to the sensitivity of this issue in the Malaysian context. The excluded items were “Thought about killing yourself because you could not find a solution to a personal problem?” and “Felt so lonely or sad you wanted to kill yourself so that you could end your pain?”. PANSI was categorized into two groups – adolescents with suicidal ideation and adolescents without suicidal ideation. Adolescents without suicidal ideation had a score of zero for the negative ideation scale. Meanwhile, adolescents with suicidal ideation had a score of one and above for the negative ideation scale. The reliability for this scale was 0.832.

Stress was measured using the Perceived Stress Scale (PSS; Cohen, Kamarak & Mermelstein, 1983). PSS measures the degree of one's life which is perceived as stressful. It consists of fourteen items scored on a 5-point scale. Each item is rated from 0 = never to 4 = very often. In this scale, there are seven positive items and seven negative items. The seven positive items are 4, 5, 6, 7, 9, 10, and 13 which are also the reversed item. The score for PSS was obtained by summing up the negative items and the reserved score of the positive items. Higher score indicated higher perceived stress in life. The reliability for this scale was 0.553 which is still in the acceptable range.

Life satisfaction was measured using the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen & Grif, n, 1985). SWLS measures one's satisfaction with life globally based on one's own judgment where they compared their current state with a standard state which they set for themselves. SWLS consists of five items scored on a 7-point scale. Each item is rated from 1 = strongly disagree to 7 = strongly agree.

Higher score indicated higher satisfaction with life. The reliability for this scale was Cronbach's alpha 0.825.

Satisfaction with maternal, paternal and peers relationship were measured using the Network of Relationships Inventory – Relationship Quality Version (NRI-RQV; Buhrmester & Furman, 2008). The NRI-RQV measures the relationship of an individual with a variety of social figures including mother, father and friends. The subscale – satisfaction was used in the current study to measure the satisfaction level of respondents with their mother, father, and peers. This subscale consists of three items scored on a 5-point scale. Each item is rated from 1 = never or hardly at all to 5 = always or extremely much. Higher score indicated higher satisfaction with the respective individual. The reliability for satisfaction with maternal, paternal, and peers relationship were Cronbach's alpha 0.756, 0.806, and 0.754 respectively.

DATA ANALYTIC PLAN

All the data obtained was analyzed using Statistical Package for the Social Sciences (SPSS) version 22. First, the data was analyzed descriptively. Then, Independent Samples t-test analysis was tested to examine the differences of all the study variables between adolescents with and without suicidal ideation. Lastly, Binary Logistic Regression analysis was run to determine the likelihood of the independent variables in influencing suicidal ideation among adolescents.

RESULTS

Table 1 displayed the mean differences of all the study variables between adolescents with and without suicidal ideation. Independent Samples t-test analysis was used to examine the differences between adolescents with and without suicidal ideation in terms of stress, life satisfaction, satisfaction with maternal, paternal, and peers relationship. Result revealed that stress ($t = -6.125$, $p < 0.001$), life satisfaction ($t =$

5.296, $p < 0.001$), satisfaction with maternal relationship ($t = 4.017$, $p < 0.001$), satisfaction with paternal relationship ($t = 3.499$, $p < 0.001$), and satisfaction with peers relationship ($t = 2.408$, $p < 0.05$) were significantly different between adolescents with and without suicidal ideation. From the result, adolescents with suicidal ideation had a higher level of stress, less satisfied with life, maternal relationship, paternal relationship, and peers relationship compared to adolescents without suicidal ideation.

Table 1: Mean differences across all study variables among adolescents with and without suicidal ideation (N = 684)

Variables		With suicidal ideation (n = 411) Mean (SD)	Without suicidal ideation (n = 273) Mean (SD)	t
Stress		42.16 (4.52)	39.95 (4.81)	- 6.125***
Life satisfaction		23.75 (5.86)	26.01 (5.20)	5.296***
Satisfaction	with Maternal Relationship	12.08 (2.49)	12.81 (2.22)	4.017***
Satisfaction with Paternal Relationship		11.40 (2.79)	12.16 (2.75)	3.499***
Satisfaction with Peers Relationship		11.51 (2.51)	11.97 (2.38)	2.408*

Note: SD = Standard deviation; * $p < 0.05$, *** $p < 0.001$

Binomial Logistic Regression was used to determine the likelihood of the independent variables in influencing suicidal ideation among adolescents. In the binomial logistic regression, the model is considered fit when the Omnibus Tests of Model Coefficients is significant ($p < 0.05$) and the Hosmer and Lemeshow Test is non-significant ($p \geq 0.05$). In the current study, the model is fit having Omnibus Tests of Model Coefficients yield a significant value with chi-square 53.929, 5 degrees of freedom (p

< 0.000). The Hosmer and Lemeshow Test also indicated good fit with significant value greater than 0.05 ($p = 0.740$).

Table 2 showed the unstandardized coefficient (B), odds ratios, 95 percent Confidence Interval (CI) and significant value of all the study variables for suicidal ideation among adolescents. The result showed that only stress and life satisfaction were the significant predictors for adolescents' suicidal ideation. Stress [$B = 0.07$, OR = 1.090 (95 percent CI 1.050 to 1.132), $p = 0.000$] significantly predicted adolescents' suicidal ideation. This means that adolescents suffered from stress were 9.0 percent more likely to have suicidal ideation. Beside stress, life satisfaction [$B = -0.040$, OR = 0.961 (95 percent CI 0.929 to 0.994), $p = 0.020$] significantly predicted adolescents' suicidal ideation. The results indicated that adolescents who were more satisfied with their life were 3.9 percent less likely in having suicidal ideation. From the result, it can also be concluded that stress exerted the most influence on adolescents' suicidal ideation, followed by life satisfaction.

Table 2: Binomial logistic regression on suicidal ideation among adolescents (N=684)

Variables	B	OR	95% CI	p-value
Stress	0.087	1.090	1.050 - 1.132	0.000
Life Satisfaction	- 0.040	0.961	0.929 - .994	0.020
Satisfaction with Maternal Relationship	- 0.068	0.934	0.840 - 1.039	0.209
Satisfaction with Paternal Relationship	0.007	1.007	0.923 - 1.098	0.879
Satisfaction with Peers Relationship	- 0.004	0.996	0.923 - 1.074	0.920

Note: B = Unstandardized coefficient; OR = odds ratio; CI = confidence interval

DISCUSSIONS

The current study found significant differences between adolescents with and without suicidal ideation. From the result, adolescents with suicidal ideation had a higher level of stress, less satisfied with life, maternal relationship, paternal relationship and peers relationship compared to adolescents without suicidal ideation.

This study revealed that at-risk adolescents suffered from suicidal thoughts as they experienced more stress. The respondents in this study were school-going high school students. In this modern and competing era, students nowadays suffered more stress where these stresses exert negative influence on students including having suicidal thoughts (Zhang et al., 2012). Local study also supported that stress from school work and family issues were the reason for suicide among students (Kok et al., 2011). Additionally, study by Grover et al. (2009) reported that both life stress and chronic stress significantly correlated with suicidal ideation and suicidal attempts. These evidences supported that stress is a significant risk factor of suicidal ideation among adolescents.

Moreover, adolescents with suicidal ideation were less satisfied with their life and their relationship with parents and peers. Previous study found that adolescents' life satisfaction was decreasing throughout their development (Goldbeck, Schmitz, Besier, Herschbach & Henrich, 2007). Heisel and Flett (2004) indicated that life satisfaction and the purpose in life were negatively correlated with suicidal ideation. Study by Yao et al. (2014) also supported this result where they found that satisfaction with life in terms of family, friends, school, and living environment were negatively associated with suicidal ideation. Thus, being satisfied with life is very important as well as being satisfied with parental and peers relationship is crucial in maintaining a healthy outcome among adolescents.

From the Binary Logistic Regression, only stress and life satisfaction significantly influence suicidal ideation among Malaysian adolescents. Stress exerted the most influence on adolescents' suicidal ideation where higher level of stress increased the

likelihood of having suicidal thoughts among adolescents. On the other hand, life satisfaction decreased the likelihood of having suicidal thoughts among adolescents. Thus, by focusing on reducing the stress level and increasing the level of life satisfaction among adolescents will help in decreasing the rates of suicidal ideation among Malaysia.

CONCLUSION, RECOMMENDATIONS, AND LIMITATIONS

Suicide is a serious public health issue in Malaysia yet researches on this issue are still lacking (NoorAni et al., 2014). This study highlighted the seriousness of suicidality in Malaysia where 60.1 percent of the respondents were at-risk as they reported having suicidal thoughts. As mentioned previously, suicidal ideation is a precursor of suicidal behavior. The figures of suicidal ideation are always much higher than suicidal behavior (WHO, 2015) where a local study reported that only 20 percent of the respondents involved in suicidal behavior (Choon et al., 2014). Although only some of the people with suicidal thoughts will turn their thoughts into action, it is still important to target these at-risk adolescents in order to prevent them from realizing their thoughts into action.

Practitioners should promote intervention programs especially for the at-risk adolescents as they have a higher risk of committing suicide. Improving adolescents' relationship with parents and peers is crucial as parents and peers served as a supporting and caring figure for adolescents. Moreover, intervention programs such as stress management programs and being satisfied with life workshops are advisable to carry out throughout the nation to curb suicidal problems.

This study successfully investigated the factors that influence suicidal ideation among adolescents. However, there were several limitations in this study where recommendations for future study are recommended. Firstly, this study employed a cross-sectional research design where causation between variables is unable to determine. Thus, it is recommended for future study to utilize mixed-method or

longitudinal research design which is able to determine the effect of the variables across a period of time. Secondly, the information was solely dependent on the adolescents where bias may occur as suicidality is a sensitive issue in our nation. Therefore, it is recommended to collect data from various parties namely parents and teacher to improve the accuracy of the data and to avoid bias.

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